

Comparative Analysis of Metric Collecting Software

High Performance Supercomputers are designed for massive computations requiring fast processing, network, and storage performance. At Los Alamos National Laboratory the High Performance Computing Monitoring Team works on developing, implementing and maintaining new infrastructure and tools to support the HPC data centers. The Monitoring Team runs low overhead metric software on the supercomputers allowing them to collect data without hindering scientific software performance. With the emergence of new metric software, we studied the impact and benefits of running these tools in a production HPC environment: Prometheus node_exporter, Lightweight Distributed Metric Service (LDMS), Telegraf, and Fluent-bit. We evaluate the pros and cons of these tools to meet our data needs on production clusters.

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